

Eisbericht Nr. 91 Amtsblatt des BSH

Jahrg	ang 96	Nr. 91	Wednesday, 05.04.2023	1

Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 70 cm dickes Festeis und im Süden bis 40 cm dickes Festeis. Außerhalb davon befindet sich im Nordosten ein Gebiet mit ebenem Eis und im Norden und Nordwesten verläuft eine Rinne mit Neueis. Auf See treibt ansonsten zumeist sehr dichtes, aufgeschobenes und aufgepresstes Eis mit Spalten, welches im Norden bis 60 cm dick und im Süden bis 40 cm dick ist. In Kvarken liegt bis 45 cm dickes Festeis in den Schären und Buchten und auf See kommt 5–25 cm dickes, dichtes Eis und Neueis vor. In der Bottensee und dem Schärenmeer kommt entlang der Küsten 5–40 cm dickes, ebenes Eis oder Festeis vor. Im Mälarsee liegt morsches Eis. Im Finnischen Meerbusen liegt in den östlichsten Buchten und den nordöstlichen Schären bis 35 cm dickes Festeis. Auf See treibt um 60°N, 27°30'O 5–30 cm dickes lockeres bis sehr dichtes Eis. In den nordwestlichen Schären liegt morsches Festeis.

Overview

In the archipelagos of the Bay of Bothnia, there is up to 70 cm thick fast ice in the north and up to 40 cm thick fast ice in the south. Further out in the northeast there is an area of level ice and in the north and northwest there is a new ice covered lead. Else at sea, there is ridged and rafted, very close ice with cracks, which is up to 60 cm thick in the north and up 30 cm thick in the south. In the Quark, there is up to 45 cm thick fast ice in the archipelagos and bays and at sea there is 5–25 cm thick, very close ice or new ice. In the Sea of Bothnia and the Archipelago Sea, 5–40 cm thick fast ice or level ice is present at the coasts. In Lake Mälaren, there is rotten ice. In the Gulf of Finland, up to 35 cm thick fast ice is present in the easternmost bays and northeastern archipelagos. At sea, 5–30 cm thick open to very close ice is drifting around 60°N 27°30'E. In the northwestern archipelagos there is rotten fast ice.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 45–70 cm thick fast ice and compact ice, out to Malören, Kemi-2 and Kattilankalla. Outside the fast ice in the northeast there is 5-15nm wide area with 5-15cm thick level ice down to about 64°20'N. Along the northern and western fast ice there is a lead with new ice from Kemi-2 down to the Skellefteå bay. At sea there is 30–60 cm thick, ridged, very close ice around 64°50N 23°E. East

and north of this area there is 10-30cm thick, very close ice. Further south at sea, there is 20–40 cm thick very close ice down to the fast ice in the Vaasa archipelago. The ice is locally ridged and rafted, but there are also leads and cracks in the ice field. The fast ice in the southern archipelagos is 20–40 cm thick.

Overall the ice will drift slowly to the north/ north-west with only minor ice formation.

Herstellung und Vertrieb

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The Quark

There is 25-45 cm thick fast ice in the Vaasa archipelago out to Ensten. On the Swedish side, there is 30-50 cm thick fast ice in inner bays. At sea, there is 5-25 cm thick very close in the east and drifting in the central part around 20°20'E there is 5-20cm thick close ice. New ice is present

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in the west. In the north there is 10-40cm thick, very close ice east of Holmöarna.

With a slow westward ice drift, some ice formation may occur, but overall no larger change is expected.

Sea of Bothnia

In the archipelagos along the eastern coast, there is 10-30 cm thick fast ice, outside the archipelagos there is very open ice and open water in the northeast. Along the western coast, there is thin level ice or thin ice in sheltered bays in the south and up to 40 cm thick fast ice in inner bays in the north.

On Ångermanälven, there is 30-50 cm thick fast ice. At sea, in the northernmost part, there is open water and very open ice.

Although there may some freezing during night, overall melting will prevail.

Archipelago Sea and Aland Sea

At the eastern coast, there is rotten ice in the inner bays, further out open water in the archipelago. In the western and central part, thin level ice, new ice

and open water is present in inner bays. Melting is expected.

Northern Baltic

In Lake Mälaren, there is rotten fast or level ice in the western part, thin open ice in the east and else open water.

Gulf of Finland

15-35 cm thick fast ice is present along the northern shores of the Neva bay and 10-20cm thick, compact ice is present from St. Petersburg out to Kotlin; further west there is open water. In the Bay of Vyborg, there is 15-25 cm thick fast ice and in the entrance 10-20cm thick very close ice out to the latitude of lighthouse Rondo and further out open water. In the Bjerkesund, there is 10-20 cm thick close ice and open water in the entrance. At sea there is an area of 10-25cm thick, very close

Melting is expected during the day and locally some ice formation may occur during night, with an overall melting preference.

ice between Moščnyj and Gogland. South of this area there is open ice down to about 59°35'N and north of this area there is open water with smaller areas with close ice. Along the northern coast, there is 20-40 cm thick fast ice in the eastern archipelagos and rotten ice is present in the inner western archipelagos.

The ice at sea will drift towards the west and the ice melt at day will be larger than the smaller, only local ice formation at night.

Skagerrak and Kattegat

Remnants of thin ice and up to 30 cm thick, partly rotten fast are present in some inner Norwegian

Swedish Lakes

Rotten ice is present in some sheltered bays in the northern part of Lake Vänern.

fiords Melting is expected.

Melting is expected.

Dr. J. Holfort

Restrictions to Navigation

	Harbour/District	At least	Ice Class	Begin
Finlend	Tania Kania IO I	dwt/hp/kW	10	00.00
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	22.02.
	Raahe	4000 dwt	IA	08.03.
	Kalajoki, Kokkola and Pietarsaari	2000 dwt	IA	08.03.
	Vaasa	2000 dwt	IB	08.03.
	Kristiinankaupunki,	2000 dwt	II	12.03.
	Pori, Rauma and Uusikaupunki	-	cancelled	05.04.
	Kaskinen and Mussala	2000 dwt	II	07.01.
	Inkoo, Kantvik, Helsinki and Sköldvik	-	cancelled	05.04.
	Loviisa and Kotka	2000 dwt	II	28.03.
	Hamina	2000 dwt		08.03.
	Lake Saimaa	2000 dwt	IB	01.04.
Sweden	Karlsborg	4000 dwt (2000 t)	IA	28.02.
	Lulea	4000 dwt	IA	28.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	04.03.
	Holmsund	2000 dwt	IC	07.02.
	Rundvik and Husum	2000 dwt	IC	04.03.
	Örnsköldsvik	2000 dwt	IC	13.02.
	Angermanälven	2000 dwt	IB	07.01.
	Söraker and Sundsvall	2000 dwt	IC	13.02.
	Härnösand,	2000 dwt	II	06.03.

Finland/Sweden

The Saimaa Canal is closed for traffic since 4th January.

Vessels bound for Gulf of Bothnia ports in which assistance restrictions apply, shall when passing latitude 60° 00' N report their nationality, name, destination, ETA and speed to ICE INFO on VHF channel 82. This report can also be given directly by telephone to +46 10 492 7600.

Vessels bound for Finnish or Swedish ports with assistance restrictions in the Quark or the Bay of Bothnia shall, 20 nautical miles before Nordvalen Lighthouse (63° 32.15' N 20° 46.60' E), report in accordance with the instructions for winter navigation to Bothnia VTS on VHF channel 67.

The traffic separation schemes in the Quark are temporarily out of use from 7 February due to ice conditions.

Icebreakers:

POLARIS, KONTIO, OTSO, SISU, ATLE, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the southern Bay of Bothnia and in the Quark. ALE assists in the Quark. URHO assists in the eastern Gulf of Finland.

Russia

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk. No sailing of barge by tug to Vyborg and Vysotsk.

Icebreakers: Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

Rafted ice

Rotten ice

Hummocked or ridged ice

Baltic Sea Ice Code

the fast

First number: A _B Amount and arrangements of sea ice 1 Open water – concentration less than 1/10 2 Very open ice - concentration 1/10 to 3/10 3 Open ice – concentration 4/10 to 6/10 4 Close ice – concentration 7/10 to 8/10 5 Very close ice – concentration 9/10 to 9+/10 6 Compact ice, including consolidated ice – concentration 10/10 7 Fast ice with drift ice outside 8 Fast ice 9 Lead in very close or compact drift ice or along the lce edge / Unable to report
Third number: TB Topography or form of ice Pancake ice, ice cakes, brash ice – less than 20 m across Small ice floes – 20 to 100 m across Medium ice floes – 100 to 500 m Big ice foes – 500 to 2000 m across Vast or giant ice floes – more than 2000 m across – or level ice

Compact slush or shuga, or compacted brash ice

Thaw holes or many puddles on the ice

No information or unable to report

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Second number: S_B Stage of ice development

New ice or dark nilas (less than 5 cm thick)
Light nilas (5 - 10 cm thick) or ice rind
Grey ice (10 - 15 cm thick)
Grey-white ice (15 - 30 cm thick)
White ice, first stage (30 - 50 cm thick)
White ice, second stage (50 - 70 cm thick)
Medium first year ice (70 - 120 cm with second stage)

Ice predominantly thinner than 15 cm with some thicker

8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice

9 Ice predominantly thicker than 30 cm with some thinner

No information or unable to report

Fourth number:

K_B Navigation conditions in ice

Navigation unobscured

Navigation difficult or dangerous for wooden vessels

without ice sheathing

Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable

Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice

4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker

Icebreaker assistance can only be given to vessels

suitable for navigation in ice and of special size
lcebreaker assistance can only be given to vessels of
special ice class and of special size

Icebreaker assistance can only be given to vessels after after special permission
Navigation temporarily closed
Navigation has ceased
Unknown

Port of St. Petersburg

St. Petersburg – E-point island Kotlin

Finland, 05.04.2023	
Röyttä – Etukari	8546
Etukari – Ristinmatala	6456
Ajos – Ristinmatala	6456
Ristinmatala – Kemi 2	5476
Kemi 2 – Kemi 1	5476
Sea area SW of Kemi 1	5746
Kemi 2 – Ulkokrunni – Virpiniemi	6456
Oulu harbours – Kattilankalla	6456
Kattilankalla – Oulu 1	6456
Sea area SW of Oulu 1	5476
High Sea N of the latitude of Marjaniemi	5476
Raahe harbour – Heikinkari	8446
Heikinkari – Raahe lighthouse	7356
Raahe lighthouse – Nahkiainen	5476
Latitude Marjaniemi – Ulkokalla, Sea	5476
Rahja harbour – Välimatala	7856
Vaelimatala to line Ulkokalla – Ykskivi	5856
Sea betw. lat. of Ulkokalla –Pietarsaari	7856
Ykspihlaja – Repskär	8846
Repskär – Kokkola lighthouse	7856
Sea area off Kokkola lighthouse	5856
Pietarsaari – Kallan	7856
Sea area off Kallan	5856
Sea lat. Pietarsaari – NE Nordvalen	5856
Sea area ENE of Nordvalen	5856
Sea area Nordvalen to W of Norrskär	5756
Vaskiluoto – Ensten	7756
Ensten – Vaasa lighthouse	5756

Vaasa lighthouse – Norrskär	5156
Sea area SW of Norrskär	5756
Kaskinen – Sälgrund	4155
Sea area off Sälgrund	4155
High sea from N to latitude Yttergrund	3752
Pori harb. to line Pori lighth. – Säppi	1102
Sea W of line Pori lighthouse – Säppi	1102
High sea betw. lat. Yttergrund a. Rauma	1102
Rauma, Harbour – Kylmäpihlaja	1102
Uusikaupunki harbour – Kirsta	8792
Kirsta – Isokari	1001
Naantali and Turku – Rajakari	1000
Rajakari – Lövskär	1001
Lövskär – Korra	1001
Lövskär – Berghamn	1001
Lövskär – Grisselborg	1001
Hanko – Vitgrund	1001
Valko Harbour – Täktarn	1705
Archipelago fairway Boistö – Glosholm	1705
Kotka – Viikari	1705
Viikari – Orrengrund	1705
Orrengrund – Tiiskeri	1705
Hamina – Suurmusta	1706
Suurmusta – Merikari	4756
Merikari – Kaunissaari	1706
Russian Federation, 05.04.2023	

83/2

53/2

E-point Kotlin – long. lighth. Tolbuhkin Lighth. Tolbuhkin – lighth. –Šepelevskij Lighthouse Šepelevskij – island Sescar Island Sescar – Island Sommers Island Sommers– S-point island Gogland S-point isl. Gogland – long. p. Kunda Vyborg, port and bay Island Vichrevoj – Island Sommers Strait Bjerkesund E-point Bol'šoj Ber'ozovyj – Šepelevskij Appr. Luga bay – line MošŠepel.	3302 12/0 13/0 53/2 52/1 12/0 83/3 53/1 43/2 12/1 11/1
Sweden, 05.04.2023 Karlsborg – Malören Sea area off Malören Luleå – Björnklack Björnklack – Farstugrunden E and SE of Farstugrunden Sandgrönn fairway Rödkallen – Norströmsgrund Haraholmen – Nygrån Sea area off Nygrån Skelleftehamn – Gåsören Sea area off Gåsören Sea area off Bjuröklubb NE of Nordvalen SW of Nordvalen Western Quark (W of Holmöarna) Umeå – Väktaren SE of Väktaren NE and SE of Sydostbrotten Fairway to Husum Örnsköldsvik – Hörnskaten Hörnskaten – Skagsudde Sea area off Skagsudde Fairway W of Ulvöarna Sea area E of Ulvöarna Sea area E of Ulvöarna Sea area ff Härnö Sundsvall – Draghällan Draghällan – Åstholmsudde Hudiksvallfjärden Iggesund – Agö Ljusnefjärden – Storjungfrun Öregrundsgrepen Hallstavik – Svartklubben Köping – Kvicksund Västerås – Grönsö Grönsö – Södertälje Stockholm – Södertälje	6456 6456 6356 6356 6356 6356 6356 6356